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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/646,568

DATE: 11/15/2001

TIME: 09:01:02

Input Set : A:\N74368B US DMG IJB HF SJB seq listing Sept 01.txt
Output Set: N:\CRF3\11152001\I646568.raw

3 <110> APPLICANT: ST GEORGE'S HOSPITAL MEDICAL SCHOOL
5 <120> TITLE OF INVENTION: DIAGNOSTICS AND VACCINES FOR MYCOBACTERIAL INFECTIONS
6 OF ANIMALS AND HUMANS
8 <130> FILE REFERENCE: N74368B DMG
10 <140> CURRENT APPLICATION NUMBER: US 09/646,568
C--> 11 <141> CURRENT FILING DATE: 2000-11-09
13 <150> PRIOR APPLICATION NUMBER: PCT/GB99/00849
14 <151> PRIOR FILING DATE: 1999-03-18
16 <150> PRIOR APPLICATION NUMBER: UK 9806093.2
17 <151> PRIOR FILING DATE: 1998-03-20
19 <160> NUMBER OF SEQ ID NOS: 5
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1335
25 <212> TYPE: DNA
26 <213> ORGANISM: Mycobacterium avium
28 <400> SEQUENCE: 1
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31 tgcaaaagggg ttcgaagctt gagcaacatg cgaaggggag aacggcctat gacgcctggg 180
32 cagggtttcg acccgccgcgaatgcactt aatgcgtggc gcttgggttt ggcgagcggg 240
33 gtgatcctat ggcattcggtt tccgctcaact ggacgtatgc cgtggccgc gttcgccag 300
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35 agctggcttc gcaaccgcataccgc tcccgcccaa tacttcaccg ctcgatgtct tgcatttc 420
36 cccgggtctgtt ggtatctgtct catcttgacg gcgttgcata tcgcgtccat aggtgtggc 480
37 gcccaggccgc gttcggccgc gaaactactg atgtccggcg ctccgatcga gtatgtcta 540
38 aaagacagtgcggtttggat gtttaagttc gatatcggtgc acacacccgcgatattcca 600
39 gttgcgggta ttggAACGG ttctctgtgg acattgggtt gggaggtgtt ttgcattatc 660
40 ggcgttagcag tattttggat gtcggactt cttatgcgc gttgggttcgt tccaggata 720
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47 ataaatccaa tgcgtttcg cgcgatttc gtcgcagcta ttttgcgcgtt cggccgcgtc 1140
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55 <212> TYPE: PRT
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62 Ala Val Glu Gln Asp Thr Ala Arg Leu Leu Glu Cys Val His Lys Arg
 63 20 25 30
 65 Pro Gln Leu Ala Ala Glu Ser Gly Cys Lys Gly Val Arg Ser Leu Ser
 66 35 40 45
 68 Asn Met Arg Arg Gly Glu Arg Pro Met Ser Leu Gly Gln Val Phe Asp
 69 50 55 60
 71 Pro Arg Ala Asn Ala Leu Asn Ala Trp Arg Leu Val Leu Ala Ser Gly
 72 65 70 75 80
 74 Val Ile Leu Trp His Ser Phe Pro Leu Thr Gly Arg Met Pro Trp Ala
 75 85 90 95
 77 Pro Phe Val Gln Leu Leu Gly Leu Gly Cys Val Asp Gly Phe Phe Ala
 78 100 105 110
 80 Val Ser Gly Tyr Leu Ile Val Ser Ser Trp Leu Arg Asn Pro His Pro
 81 115 120 125
 83 Ala Gln Tyr Phe Thr Ala Arg Cys Leu Arg Ile Leu Pro Gly Leu Trp
 84 130 135 140
 86 Ile Cys Leu Ile Leu Thr Ala Phe Val Ile Ala Pro Ile Gly Val Gly
 87 145 150 155 160
 89 Ala Gln Gly Gly Ser Ala Ala Lys Leu Leu Met Ser Gly Ala Pro Ile
 90 165 170 175
 92 Glu Tyr Val Leu Lys Asp Ser Ala Val Trp Met Val Lys Phe Asp Ile
 93 180 185 190
 95 Gly Gly Thr Pro Arg Asp Ile Pro Val Ala Gly Ile Trp Asn Gly Ser
 96 195 200 205
 98 Leu Trp Thr Leu Gly Trp Glu Val Leu Cys Tyr Ile Gly Val Ala Val
 99 210 215 220
 101 Phe Gly Met Leu Gly Leu Leu Ser Arg Arg Trp Phe Val Pro Gly Ile
 102 225 230 235 240
 104 Leu Ile Leu Ala Leu Ser Trp Ser Val Phe Leu Pro Ala Trp Gly Gly
 105 245 250 255
 107 Ile His Ala Ile Ala Ser Asn Ala Ala Arg Phe Ala Val Met Phe Ser
 108 260 265 270
 110 Ala Gly Ala Leu Leu Tyr Gln Phe Arg Asn Val Ile Pro Ala Arg Trp
 111 275 280 285
 113 Ser Phe Val Ala Val Gly Leu Ile Ile Val Val Val Ser Ser Ala Val
 114 290 295 300
 116 Leu Pro Asp Tyr Arg Leu Val Ala Ala Leu Pro Met Ala Tyr Leu Ile
 117 305 310 315 320
 119 Ile Ala Ser Gly Ser Leu Ile His Asn Gln Arg Met Arg Phe Arg Thr
 120 325 330 335
 122 Asp Leu Ser Tyr Gly Val Tyr Ile Tyr Ala Phe Pro Ile Gln Gln Val
 123 340 345 350
 125 Leu Val Leu Cys Gly Phe Ala Glu Ile Asn Pro Ile Ala Phe Cys Ala
 126 355 360 365
 128 Ile Ser Val Ala Ala Ile Leu Pro Leu Ala Ala Leu Ser Trp Phe Leu
 129 370 375 380
 131 Val Glu Lys Pro Ala Leu Ser Trp Lys Ser Arg Leu Arg Arg Lys Asn
 132 385 390 395 400
 134 Ser Ser Ile Ala Leu Ala Asn Met Glu Asp Gly Gly Ser Val Gly Arg

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135 405 410 415
 137 Ser Asn Asp Ile Pro Gly Arg Arg Ala Arg Phe Ile Gly Glu Lys Ala
 138 420 425 430
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 146 <212> TYPE: DNA
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 156 gtgtcgatcg tcttgcgcac ggtgttgcg gccaggccgc ggttagaggac ctgcgtcagg 420
 157 tcggcggtgg tgaagtagcg gactttgaat ccggcggtgg cggcagcggt ccccgccg 480
 158 atgagcagg gactttgcc cgtaccagg gggccaaatga cccgcagggtt ctgttgc 540
 159 cgaatccatt ccaggctcg aaggtatcg aacgtggctg cgggtatcg cgtatccgg 600
 160 acgtcgaaacc cgtcgagggt ctgggtgacc gggaaaggctg cggccttgc acggttggcg 660
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199 <400> SEQUENCE: 4
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203 ggagtctgca agggagcgta tgaacatcat ttcggcgtat caccaggtcg ggtcgtatcg 240
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207 gatgcggcc gctggcggt atcaggggctc ggcccgtaac ttccggccccc tggtagccga 480
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256 Glu Arg Met Asn Ile Ile Ser Ala Tyr His Gln Val Gly Ser Tyr Arg
257 35 40 45
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260 50 55 60
262 Ile Glu Arg Ala Glu Ala Gly Gly Ala Pro Pro Arg Glu Pro Arg Pro
263 65 70 75 80
265 Arg Asn Leu Asp Ala Phe Thr Asp Leu Val Ala Thr Arg Val Glu Lys
266 85 90 95
268 Ser His Gly Lys Met Ser Ala Lys Arg Met Leu Pro Ile Ala Arg Ala
269 100 105 110
271 Ala Gly Tyr Gln Gly Ser Ala Arg Asn Phe Arg Arg Leu Val Ala Glu
272 115 120 125
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275 130 135 140
277 Val Trp Ser Pro Gly Asp Tyr Leu Val Met Asp Trp Ala Glu Ala Ala
278 145 150 155 160
280 Pro Gly Leu Met Val Leu Cys Ala Glu Leu Ala Tyr Ser Arg Trp Arg
281 165 170 175
283 Phe Glu Arg Phe Ala Ala Asp Glu Lys Ala Ser Thr Thr Gln Ala Met
284 180 185 190
286 Ile Ala Glu Ala Leu Glu Ala Ile Gly Gly Val Pro Ala Lys Ile Leu
287 195 200 205
289 Ala Asp Arg Met Gly Cys Leu Lys Gly Gly Val Val Ala Asn Val Val
290 210 215 220
292 Val Pro Thr Pro Asp Tyr Val Arg Phe Ala Ser His Tyr Gly Phe Val
293 225 230 235 240
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296 245 250 255
298 Asn Leu Cys Gly Tyr Ala Gln Asp Asp Leu Ala Val Pro Leu Leu Thr
299 260 265 270
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302 275 280 285
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307 Ile Cys Ala Val Pro Asn Asp Arg Leu Val Asp Glu Arg Thr Val Leu
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VERIFICATION SUMMARY
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Input Set : A:\N74368B US DMG IJB HF SJB seq listing Sept 01.txt
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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date